Chin.Astron.Astrophys.(1991)15/4,481-484 © Pergamon Press plc.
Printed in Great Britain
0275-1062/91$10.00+.00

CHINESE ASTRONOMY AND ASTROPHYSICS
VOLUME 15 (1991)

SUBJECT INDEX

Physical Processes. Jets. Active Galactic Nuclei.
A phenomenological analysis of the spectral bimodality in the QPO object GX 5-1 / *YOU Jun-han, LU Tan, FENG Long-long and YAN Ming* 37

Physical mechanisms for the bipolar jets around young stellar objects and their knotty structure / *YUE Zeng-yuan and G. Winnewisser* (Express Research Report) 78

Observational study of jets in extragalactic objects. I. A rapid brightening in the core of 3C 120 / *SUN Kai, ZHANG Wen-yuan and LI Zhi-ping* 83

Observational studies of jets in extragalactic objects. II. Three extensions / *SUN Kai, LI Zhi-ping and ZHANG Wen-yuan* 90

A study of cosmic ray re-acceleration in the interstellar space / *ZHANG Li* and *YU Chuan-zan* 353

On the structure of thin magnetized accretion disks of active galactic nuclei and their coronal radiation / *YANG Lan-tian, WU Xue-bin and YANG Pi-bo* 386

Observational and Theoretical Cosmology
Large-scale peculiar velocities of galaxies / *XIANG Shou-ping, CHENG Fu-zhen* and *LIU Jian-min* 121

Five dimensional Bianchi-V type perfect fluid cosmological models / *WANG Xing-xiang* 234

The momentum of scalar field and the wave function of the universe / *FAN Zu-hui* and *YU Yun-qiang* 241

A new diagram for illustrating the horizon problem / *T. Kiang* (Abstract) 480

Black Holes
Can black-hole entropy be quantized ? / *WANG Ding-xiong* 164

Radio Galaxies
A radio study of the Abell cluster A 514 / *ZHAO Ren-yang, J. Bagchi and P. K. Manoharan* 46

Clusters of Galaxies
The radial velocity membership of the Virgo Cluster / *ZHAO Jun-liang, PAN Rong-shi, HUANG Song-nan and HE Yan-ping* 95

Galaxies
Objective prism survey of emission-line galaxies. IV. / *HUANG Yong-wei, LIU Ji-ying* and *FENG Xing-chun* 131

Some properties of the SN 1987 A pulsar / *ZHAO Yong-heng, LU Tan* and *LU Jian-long* 191

Galactic gamma-ray sources in the 40-50 MeV range / *LI Ti-pei* and *WU Mei* 227

Cosmic ray and hydrogen distributions and cosmic gamma-rays / *ZHOU Da-zhuang and K. K. Tang* 416

Polarization observations of four southern pulsars at 1560 MHz/ *WU Xin-ji, R. N. Manchester and A. G. Lyne* 423

Galactic Structure

CO and HI emissivities at subcentral points and spiral arms / *XIANG De-lin* (Abstract) 240

Two-dimensional Milky Way spiral arm contrasts / *XIANG De-lin* (Abstract) 364

Nebulae

Compact reflection nebulae associated with protoplanetary nebulae / *HU Jing-yao and TANG Qing-quan* 65

The disappearance of eclipses in the central star of the planetary nebula NGC 2346 /*HAO Xiang-liang* 431

Masers. Molecular Clouds

Evolution of the double peak spectrum of the OH-1612 MHz maser on the asymptotic giant branch / *SUN Jin, ZHANG Guo-jin* and *FANG Geng* 197

Far infrared characteristics of water maser associated IRAS point sources / *ZHOU Zhen-pu* and *HE Li-da* 207

OH masers in W33B / *ZHENG Xing-wu* 219

Near-infrared observations and analyses of molecular outflows / *SUN Jin, WU Yue-fang, MAO Xin-jie and LI Shou-zhong* 375

Star Clusters

Studies on the Coma cluster. III. The virial mass and kinematics / *ZHAO Jun-liang, HUANG Song-nian, PAN Rong-shi* and *HE Yan-ping* 260

Compactness of globular cluster and its evolution / *ZHANG Mei* and *MA Er* 251

Stars

Low-dispersion spectra of ten Me stars / *Feng Xing-chun, Huang Yong-wei and LIU Ji-ying* 72

An infrared study of M-type giants /*CHEN Pei-sheng, GAO Heng, DONG Hong-wei* and *CHEN Yan-kang* 150

A stellar wind dynamic model for S106 / *JIANG Dong-rong* and *FU Cheng-qi* 178

IRAS 19213+1723: a new compact H II region / *QIAN Zhong-yu, HU Jing-yao* and *JIANG Bi-wei* 231

Binaries

A photoelectric photometric study of the eclipsing binary DF Hydrae / *LIU Qing-yao, YANG Yu-lan, ZHANG Yun-lin, WANG Bi and ZHANG Zhou-sheng* 12

The contact binary system AH Tauri /*LIU Qing-yao, YANG Yu-lan, ZHANG Yun-lin* and *WANG Bi* 143

A Roche model solution of the eclipsing binary WX Cancri / *LU Wen-xian, WANG You-ru* and *WANG Xiu-mei* 214

Photoelectric observations of lunar occultations of six binaries in Pleiades /*QIAN Bo-chen* and *FAN Qing-yuan* 336

Infrared Astronomy

A search for infrared stellar objects in a region in Carina / *XIAO Zhen* and *LI Jing* 270

Early-type emission-line stars with large infrared excesses / *DONG Yi-sun* and *HU Jing-yao* 275

Infrared observational study of MS and CS stars / *CHEN Pei-sheng, GAO Heng, BAO Chu-xian and CHEN Yan-kang* 345

Near infrared photometry and analysis of OH masers stars of different types / *SUN Jin, FANG Geng* and *WEI Han* 306

The non-synchronous systems among RS CVn stars / *TAN Hui-song, WANG Xun-hao and PAN Kai-ke* 461

Solar Observations. Solar-Terrestrial Relations

Two-dimensional power spectrum of small-scale magnetic fields on the quiet sun / *WANG Jing-xiu, SHI Zhong-xian and LIU Jian-qiang* (Abstract) 239

On the determination of the transverse magnetic field and current in the photosphere / *WU Lin-xiang and AI Guo-xiang* (Abstract) 240

Spectral analysis of solar radio Type III burst groups / *M. Pick, A. Mangeney* and *ZHAO Ren-yang* 298

Statistical properties of solar gamma-ray flares /*Xu Ao-ao, YIN Chun-lin, ZHANG He-qi* and *S. T. Wu* 318

Solar flare and sudden change of Earth's rotation / *FENG Bo* 329

Fast fine structure in solar radio bursts at 3 cm waves / *QIN Zhi-hai, JIANG Shu-ying, WEI Shuang-lin* and *CHEN Yun-xia* (Fast Research Report) 362

Some statistical features of solar radio SVC in the rising branch of Cycle 22 / *ZHANG Bai-rong and MA Yuan* 449

Solar Physics

Solar atmospheric responses to magnetic flux eruptions. I. A mechanism for coronal mass ejections / *HU You-qiu* and *ZHANG Hui-nan* 284

Solar atmospheric responses to magnetic flux eruptions. II. Slow shocks near the Sun / *HU You-qiu* and *Zhang Hui-nan* 292

A semi-empirical model of sunspot umbra / *DING Ming-de and FANG Cheng* 28

Vertical motion of dark filaments and occurrence of flares / *XU Ao-ao and WU Gui-ping* 103

Stability of force-free fields /*HU You-qiu* 169

Closed loop model of turbulent acceleration for the gradual phase of the radio burst of 1981 April 27 / *YAO Jin-xing* 408

MHD oscillations in the solar spike radiation / *ZHAO Ren-yang, JIN Sheng-zhen, FU Qi-jun and LI Xiao-cong* 439

An explanation of the dimensions of penumbral filaments / *ZHOU Dao-qi* 453

Two-dimensional MHD equilibria in the solar corona / *WANG Shui, S. T. Wu and A. H. Wang* 470

Planets and Satellites

On the gas dynamics of the volcanic plumes on Io /*ZHANG Bin* 157

Comets and Meteors

Visual observations of eta aquarids / *FENG Zhan-liang and XU Pin-xin* 50

Celestial Mechanics

Numerical research on the Sitnikov problem / *LIU Jie, ZHOU Ji-lin* and *SUN Yi-sui* 339

The orbital resonance among the Galilean satellites I, II and III of Jupiter / *ZHAO Chang-yin and LIU Lin* 366

The influence of the orbital eccentricity of a primary on the chaotic region / *LIU Jie* 446

Fundamental Astronomy. Astrometry

Determination of 1988 earth rotation parameters from optical astrometry data / *LIAO De-chun and JIN Wen-jing* 1

Optical positions of radio stars and radio sources / *XU Tong-qi, LU Pei-zhen, WANG Shu-he and CHU Zong-yuan* 19

Chandler wobble and annual polar motion from 1965.0 to 1985.0 / *GAO Bu-xi* 111

J2000.0 positions and proper motions of 257 stars in the central part of the Praesepe astrometric standard region / *WANG Jia-ji and JIANG Pei-fang* 397

Instrumentation

An astrometric test of the Shanghai 1.5 m R-C reflector / *MAO Ya-qing* 56

A new double passband mode for a birefringent filter used for solar vector video magnetographs and video dopplergraphs / *AI Guo-xiang, R.J. Fear and JI Pei-wen* (Abstract) 239

Correction for refraction in radio astronomy and satellite geodesy / *T. A. Th. Spoelstra and YANG Yi-pei* (Abstract) 239

Interference rejection in Miyun Synthesis Radio Telescope / *YANG Yi-pei, ZHENG Yi-jia et al.* (Abstract) 364

Editorial 365

Reproduced with the permission of Pergamon Press Inc., by University Microfilms Inc. Duplication or resale without permission is prohibited.